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June 29, 2010

Mr. Jonathan M. Pachter
CONSOL Energy, Inc.
CNX Center
1000 CONSOL Energy Drive
Canonsburg, Pennsylvania 15317

RE: Report of the Feasibility of Controlling
Golden Algae in the Dunkard Creek Watershed
by Adjusting pH at the St. Leo Outlet
Project No. 0101-09-0408-105

Dear Mr. Pachter:

Potesta & Associates, Inc. (POTESTA) is pleased to provide Consol Energy, Inc. our report on "The Feasibility of Controlling Golden Algae in the Dunkard Creek Watershed by Adjusting pH at the St. Leo Outlet." As you requested, we are also having copies of the report hand-delivered today to Mike Zeto, Tom Clarke and Scott Mandirola at the West Virginia Department of Environmental Protection headquarters.

Sincerely,

POTESTA & ASSOCIATES, INC.

Mindy Y. Armstead

Mindy Y. Armstead, Ph.D.
Senior Scientist

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MYA:WFD/clr

Enclosure
C: Mike Zeto
Tom Clarke
Scott Mandirola

REPORT ON THE FEASIBILITY OF CONTROLLING GOLDEN ALGAE IN THE DUNKARD CREEK WATERSHED BY ADJUSTING pH AT THE ST. LEO OUTLET

Prepared for:

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Project No. 0101-09-0408-105

June 29, 2010

POTESTA

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REPORT ON THE FEASIBILITY OF CONTROLLING GOLDEN ALGAE IN THE DUNKARD CREEK WATERSHED BY ADJUSTING pH AT THE ST. LEO OUTLET

1.0 INTRODUCTION

On April 23, 2010 (effective April 30, 2010), Consolidation Coal Company ("CONSOL") was issued a unilateral compliance order (Order) by the West Virginia Department of Environmental Protection (WVDEP), Order No. M-10-071. Item No. 15(c) of the Order directed CONSOL to evaluate the feasibility of lowering the pH of CONSOL's Loveridge Mine, St. Leo discharge to the South Fork of West Virginia Fork of Dunkard Creek for the purpose of discouraging the growth of golden algae and to submit a written report and recommendation to WVDEP by June 29, 2010. The St. Leo discharge is No. 016 on NPDES Permit No. WV0040711.

CONSOL retained Potesta & Associates, Inc. (POTESTA) to conduct a feasibility study of lowering the pH of the St. Leo discharge for the purpose of discouraging the growth of golden algae in Dunkard Creek. This report presents the results of POTESTA's evaluation completed to satisfy the requirements of Item No. 15(c) of WVDEP's Order No. M-10-071.

2.0 BACKGROUND INFORMATION

CONSOL operates a mine dewatering and treatment system for the Loveridge Mine which includes the St. Leo treatment plant. Water collected in the mine is treated by the addition of hydrated lime followed by sedimentation to remove metals (primarily iron). Treated water is discharged to South Fork of West Virginia Fork which is a tributary to Dunkard Creek. Figure 1 in Appendix A shows the St. Leo discharge location. The St. Leo discharge is regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. WV0040711, Outlet 016.

Following the golden algae bloom in 2009, CONSOL was directed by the WVDEP to reduce the chloride loadings from the St. Leo outlet. CONSOL is complying with this requirement by directing water from the Loveridge Mine away from the St. Leo discharge to the Sugar Run Coal Preparation Plant via an intra-mine pipeline. As a result of other steps taken to divert water pursuant to WVDEP Orders, the current maximum allowable discharge from the St. Leo treatment facility through Outlet 016 is 180 gallons per minute. The pumping capacity at the St. Leo treatment facility is 750 gallons per minute.

POTESTA evaluated the feasibility of adjusting the pH of the St. Leo treatment facility discharge to inhibit algae growth and/or the toxicity resulting from golden algae in the event of a bloom in the Dunkard Creek drainage basin. This report presents a summary of the evaluation.

2.1 Golden Algae

To date, there are few examples of attempts to treat golden algae blooms in natural systems, such as Dunkard Creek. Several treatment options have been applied in ponds and small reservoirs, such as fish hatcheries, with limited success (Barkoh & Fries, 2005). Research into treating natural systems is ongoing (Rodger et al., 2009) with consideration now being given to treating the Dunkard Creek system, should it become necessary. This evaluation includes addressing the physical conditions that are favorable to the growth of golden algae, namely low flow, stagnant water conditions, and water chemistry factors. Water chemistry conditions that are favorable to golden algae growth are believed to be waters with increased salinity and waters with pH above 7.2 S.U.

2.2 St. Leo Outlet pH Adjustment

Currently, the St. Leo mine water is treated to reduce iron concentrations. The raw mine water is treated by the addition of hydrated lime, followed by sedimentation. Hydrated lime is added to raise pH in order to facilitate the precipitation and subsequent settling of metals.

Two options for lowering the pH of the St. Leo discharge were assessed:

- Discharge the untreated mine water directly to the South Fork, to reduce the pH of the receiving stream downstream of Outlet 016.
- Lower the pH of the treated effluent with an acid prior to discharge.

2.2.1 Option 1 - Discharge Raw Mine Water Directly to the South Fork of West Virginia Fork

The raw mine water at the St. Leo facility has a median pH of 7.27 S.U. (field) with a range of 7.06 to 7.47, and an average total iron of 8.23 mg/l within a range of 2.73 to 12.10, based on five samples collected from September 2007 through April 2010 (Table 1 in Appendix C). West Virginia Fork of Dunkard Creek, just downstream of Wadestown, has a median pH of 8.07 S.U. within a range of 7.64 to 8.30, based on eleven samples collected in March 2010 (Table 2 in Appendix C). Wadestown is at the confluence of the four streams that form West Virginia Fork: Range Run, North Fork, Middle Fork, and South Fork. West Virginia Fork at Blacksville located 4.2 miles downstream of Wadestown, has a median pH of 7.99 S.U. Historically, the St. Leo discharge during the dry summer months was a significant portion of the total flow of the South Fork. The flow at the United States Geological Service (USGS) stream gage at Shannopin, Pennsylvania for September 2009 is summarized in Table 3 in Appendix C. With the recent alterations to the St. Leo discharge (Outlet 016) as required by the Order, the discharge rate is now 180 gpm (0.40 cfs). The drainage basin areas of various reference locations along South Fork and West Virginia Fork are summarized in Table 4 and Table 5 in Appendix C, with stream flows proportioned based on drainage area and the average September 2009 flow for the USGS stream gage at Shannopin. Based on this information, Attachment 1 contained in Appendix B provides a calculation that predicts the reduction in pH that would occur downstream at Wadestown and Blacksville if the raw mine water at St. Leo was discharged directly to the South Fork at the current maximum pumping rate of 180 gpm and a pH of 7.27 S.U.

The calculations included in Attachment 1 (Appendix B) show that Option 1 is not a viable alternative to controlling golden algae in the Dunkard Creek watershed because the pH of the untreated mine water is not low enough to impede the growth of the algae, the raw mine water pH level is relatively neutral, 7.27 S.U. (field) and 7.66 S.U. (lab), and the current pumping rate at St. Leo (180 gpm or 0.40 cfs) is not large enough to significantly influence downstream pH levels. Also, a concern with Option 1 is that iron staining in the South Fork would likely occur if treatment with hydrated lime was eliminated. Only a 50 percent reduction in iron level from the current 8.23 mg/l level would be expected if hydrated lime treatment was eliminated. Staining in the South Fork would likely occur for at least 100 feet downstream of the outfall. Additionally, an NPDES permit variance for iron would have to be obtained. Given the limited potential to affect the conditions that are conducive to golden algae growth or toxicity with the slight pH reductions, this alternative is not viable.

In addition, the calculations provided in Attachment 1 (Appendix B) do not take into account the buffering capacity of the receiving stream. Alkalinity of the St. Leo underground mine water averages 1,242 mg/l as $CaCO_3$, and the streams in the Dunkard Creek drainage basin are in the 50 to 90 mg/l as $CaCO_3$ range (Table 2 in Appendix C). This buffering capacity would make the net decrease in pH even less than that predicted by the mass balance calculation provided in Attachment 1 (Appendix B).

2.2.2 Option 2 - Lower the pH of the St. Leo Discharge with Acid

Option 2 considers operating the St. Leo treatment facility as it is currently being operated with a discharge of 180 gpm but with acidification of the effluent prior to discharge. This option results in an effluent in compliance with total iron, as well as a lower pH, to allow greater reduction in stream pH levels downstream. Attachment 2 contained in Appendix B provides a calculation that predicts the reduction in pH levels downstream that would occur if the St. Leo discharge pH level was adjusted to 6.00 S.U.

The calculations show that reducing the pH of the discharge is not a viable alternative for discouraging the growth of golden algae in the Dunkard Creek watershed for the same reasons as Option 1. With a pH level of 6.00 S.U. and the current average pumping rate of 180 gpm, the calculations show that the pH reduction downstream would be insignificant and would not contribute substantially in controlling a golden algae bloom or decreasing the toxicity of the algae.

Also considered was the option of reducing the pH of the St. Leo discharge below the water quality standard of 6.0 S.U. to evaluate the potential benefits to the receiving stream as a result of golden algae impairment. The results of the mass balance calculation shown in Attachment 3 (Appendix B) indicate that at a discharge of 180 gpm, the St. Leo would have to be reduced to 4.0 S.U. to produce pH changes in the receiving stream which might affect the golden algae. Discharging at a pH of 4.0 S.U. results in estimated in-stream pH values of 6.14 S.U. and

6.28 S.U. at Wadestown and Blacksville, West Virginia, respectively. Given the alkalinity present in the stream, the actual decrease in pH would be less. Although this may have potential benefits in terms of golden algae control, reducing the pH to this level would result in impairment of the aquatic life due to the acidic conditions which would negate the benefits of the golden algae reductions.

Additionally, there is significant concern with this option due to the use of mineral acids, such as sulfuric acid or hydrochloric acid which would be used to lower the pH. These additions would result in an increase in chloride or sulfate concentrations (essentially total dissolved solids) which could be counter productive in efforts to impede golden algae. Reduction of the pH using a non-mineral acid (carbon dioxide) would provide only a temporary reduction in pH due to the gradual outgassing of the carbon dioxide gas.

3.0 CONCLUSION

As discussed above, manipulation of pH of the St. Leo discharge to create conditions unfavorable to golden algae growth and toxicity does not appear to be feasible under the current conditions. The generally alkaline nature of the mine water and the substantial buffering capacity create a stable pH in the discharge. A reduction in the pH to levels required to effectively impede golden algae growth or toxicity would create additional impairment in the receiving stream negating the positive effects of the pH reductions.

4.0 RECOMMENDATION

Lowering the pH of the St. Leo discharge is not a feasible means of lowering the pH of the receiving stream to a level that would discourage the growth of golden algae.

5.0 CLOSING

The scope of this report is limited to the specific project and location described herein and has been prepared as per the requirements of the Order. It represents our understanding of the factors as presented in this report. If these factors change, modifications or revisions to the conclusions presented in this report could be appropriate.

6.0 REFERENCES

Barkoh, Aaron and Loraine T. Fries, 2005. Management of *Prymnesium Parvum* at Texas State Fish Hatcheries.

Rodgers, Jr., John H., Brenda M. Johnson, and West M. Bishop. Comparison of Three Algaecides for Controlling the Density of *Prymnesium Parvum*, Department of Forestry and Natural Resources, Clemson University.

APPENDIX A

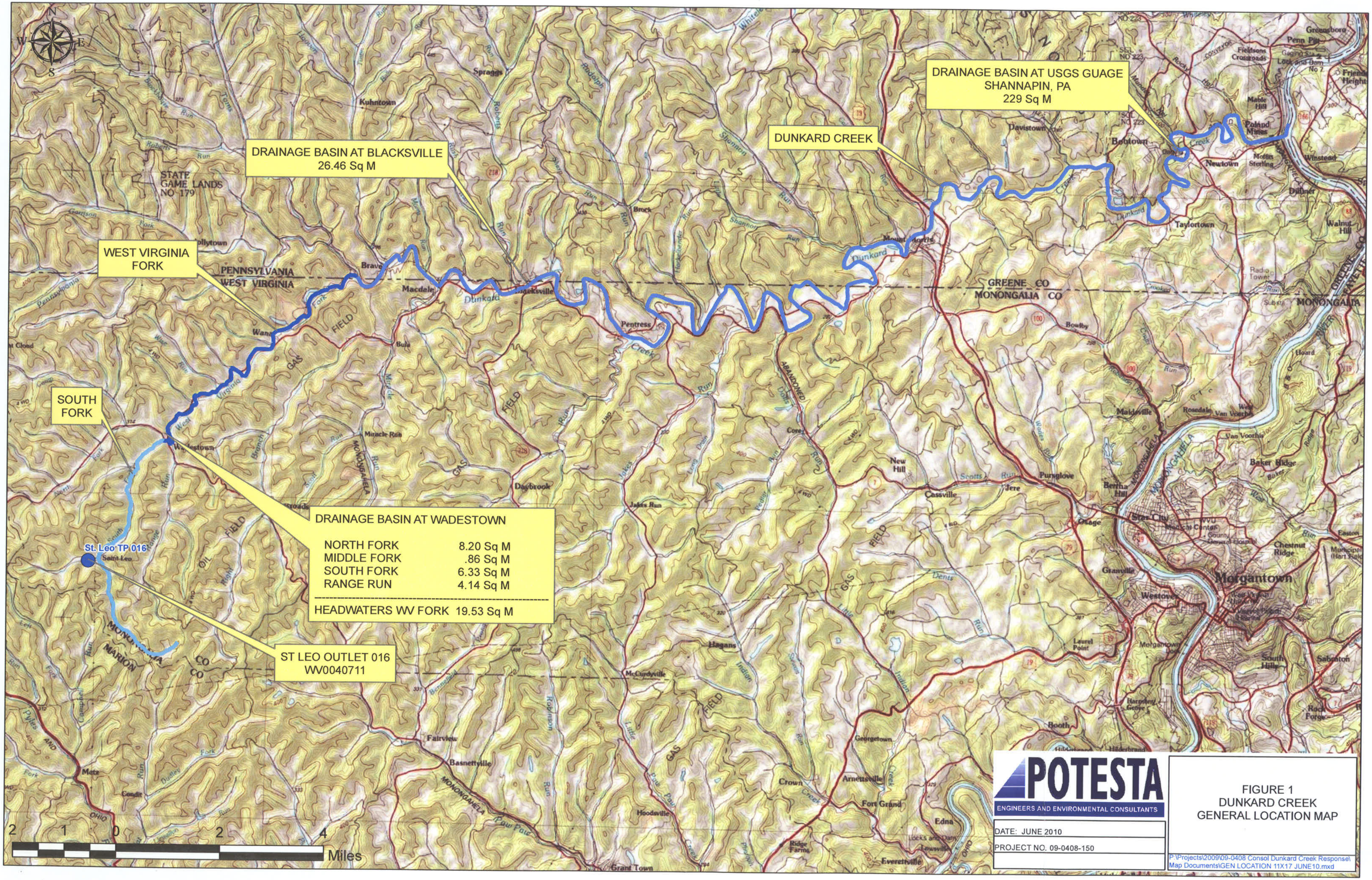

FIGURE 1
DUNKARD CREEK
GENERAL LOCATION MAP

APPENDIX B

ATTACHMENT 1

Raw Water Discharge

Problem: Determine the change in pH downstream of Wadestown and Blacksville resulting from the discharge of raw water at the St Leo outlet.

Given:

St. Leo Pump Capacity
180 gpm Average Flow 0.40 cfs Average Flow

Drainage Area
6.33 sq mi Mouth of South Fork
19.53 sq mi Drainage Basin at Wadestown
26.46 sq mi West Virginia Fork at Blacksville

pH Readings
7.27 Raw Underground Mine Water pH a St Leo
8.03 pH of Stream at Wadestown
7.93 pH of Stream at Blacksville

	pH	Flow (CFS)	Hydrogen Ion Concentration
Raw Water from St. Leo Mine	7.27	0.40	5.37E-08
pH of WV Fork At Wadestown	8.03	55.75	9.33E-09

Proportional Weighted Average Calculation			
0.40 55.75 -------- 55.35 55.75	0.01 ------------------------ 0.99	7.27 -------- 8.03	3.85E-10 -------- 9.27E-09
Ans.	Stream pH at Wadesville		8.02
Ans.	pH Decrease		0.01

	pH	Flow (CFS)	Hydrogen Ion Concentration
Raw Water from St. Leo Mine	7.27	0.40	5.37E-08
pH of WV Fork At Blacksville	7.93	75.58	1.17E-08

Proportional Weighted Average Calculation			
0.40 75.58 -------- 75.18 75.58	0.01 ------------------------ 0.99	7.27 -------- 7.93	2.84E-10 -------- 1.17E-08
Ans.	Stream pH at Blacksville		7.92
Ans.	pH Improvement		0.01

ATTACHMENT 2

St. Leo Outlet pH Adjustment

Problem: Determine the change in pH downstream of Wadestown and Blackville resulting from the discharge of 6.00 pH water at the St Leo outlet.

Given: St. Leo Pump Capacity
180 gpm Average Flow 0.40 cfs Average Flow

Drainage Area
6.33 sq mi Mouth of South Fork
19.53 sq mi Drainage Basin at Wadestown
26.46 sq mi West Virginia Fork at Blacksville

pH Readings
6.00 St. Leo Outlet Acidified to 6.00 pH
8.03 pH of Stream at Wadestown
7.93 pH of Stream at Blacksville

	pH	Flow (CFS)	Hydrogen Ion Concentration
Acidified Water from St. Leo Discharge	6.00	0.40	1.00E-06
pH of WV Fork At Wadestown	8.03	55.75	9.33E-09

Proportional Weighted Average Calculation			
0.40 55.75 -------- 55.35 55.75	0.01 ----------------------- 0.99	6.00 -------- 8.03	7.17E-09 -------- 9.27E-09
Ans.	Stream pH at Wadestown		7.78
Ans.	pH Improvement		0.25

	pH	Flow (CFS)	Hydrogen Ion Concentration
Acidified Water from St. Leo Discharge	6.00	0.40	1.00E-06
pH of WV Fork At Blacksville	7.93	75.58	1.17E-08

Proportional Weighted Average Calculation			
0.40 75.58 -------- 75.18 75.58	0.01 ----------------------- 0.99	6.00 -------- 7.93	5.29E-09 -------- 1.17E-08
Ans.	Stream pH at Blacksville		7.77
Ans.	pH Improvement		0.16

ATTACHMENT 3

St. Leo Outlet pH Adjustment

Problem: Determine the change in pH downstream of Wadestown and Blackville resulting from the discharge of 4.00 pH water at the St Leo outlet.

Given: St. Leo Pump Capacity
180 gpm Average Flow 0.40 cfs Average Flow

Drainage Area
6.33 sq mi Mouth of South Fork
19.53 sq mi Drainage Basin at Wadestown
26.46 sq mi West Virginia Fork at Blacksville

pH Readings
4.00 St. Leo Outlet Acidified to 4.00 pH
8.03 pH of Stream at Wadestown
7.93 pH of Stream at Blacksville

	pH	Flow (CFS)	Hydrogen Ion Concentration
Acidified Water from St. Leo Discharge	4.00	0.40	1.00E-04
pH of WV Fork At Wadestown	8.03	55.75	9.33E-09

Proportional Weighted Average Calculation			
0.40 55.75 -------- 55.35 55.75	0.01 ---------------------- 0.99	4.00 -------- 8.03	7.17E-07 -------- 9.27E-09

Ans.	Stream pH at Wadestown	6.14
Ans.	pH Improvement	1.89

	pH	Flow (CFS)	Hydrogen Ion Concentration
Acidified Water from St. Leo Discharge	4.00	0.40	1.00E-04
pH of WV Fork At Blacksville	7.93	75.58	1.17E-08

Proportional Weighted Average Calculation			
0.40 75.58 -------- 75.18 75.58	0.01 ---------------------- 0.99	4.00 -------- 7.93	5.29E-07 -------- 0.00E+00

Ans.	Stream pH at Blacksville	6.28
Ans.	pH Improvement	1.65

APPENDIX C

TABLE 1

St. Leo Raw Water Quality

4 Left Pump

	9/28/2007	10/23/2007	12/16/2008	6/10/2009	4/7/2010	Median	Average
Field pH	-	-	7.47	7.06	-	7.27	
Lab pH	7.46	7.66	7.61	7.82	8.06	7.66	
Acidity	-1215	-840	-1340	-1290	-1320		-1201
Alkalinity	1255	880	1342	1292	1440		1242
Iron	7.22	10.57	2.73	8.50	12.10		8.23

TABLE 2

Dunkard Creek Watershed Alkalinity and pH Data

Sample Location	Collection Date	Alkalinity (mg/L)
Dunkard @ Pentress, WV	03/09/2010	50
Dunkard @ Pentress, WV	03/17/2010	65
Dunkard @ Pentress, WV	03/24/2010	81
Dunkard @ Pentress,WV	03/02/2010	76
	Average	68
WV Fork US Outlet 003 (Blacksville II)	03/09/2010	214
WV Fork US Outlet 003 (Blacksville II)	03/17/2010	216
WV Fork US Outlet 003 (Blacksville II)	03/24/2010	251
WV Fork US Outlet 003 (Blacksville II)	03/02/2010	279
	Average	240
WV Fork @ Wadestown, WV	03/09/2010	41
WV Fork @ Wadestown, WV	03/17/2010	66
WV Fork @ Wadestown, WV	03/24/2010	63
WV Fork @ Wadestown,WV	03/02/2010	61
	Average	58
St. Leo DS AMD Plant	03/02/2010	106
St.Leo DS AMD Plant	03/09/2010	56
St.Leo DS AMD Plant	03/17/2010	113
St.Leo DS AMD Plant	03/24/2010	114
	Average	97

Sample Location	Collection Date	pH
Dunkard @ Pentress,WV	3/1/2010	8.08
Dunkard @ Pentress,WV	3/2/2010	8.01
Dunkard @ Pentress,WV	3/8/2010	7.79
Dunkard @ Pentress,WV	3/9/2010	7.85
Dunkard @ Pentress,WV	3/12/2010	7.83
Dunkard @ Pentress,WV	3/17/2010	7.94
Dunkard @ Pentress,WV	3/23/2010	8.01
Dunkard @ Pentress,WV	3/24/2010	7.89
Dunkard @ Pentress,WV	3/25/2010	7.92
Dunkard @ Pentress,WV	3/29/2010	8.01
Dunkard @ Pentress,WV	3/30/2010	7.93
	Median Value	7.93
WV Fork US Outlet 003 (Blacksville II)	3/8/2010	8.02
WV Fork US Outlet 003 (Blacksville II)	3/9/2010	8.09
WV Fork US Outlet 003 (Blacksville II)	3/12/2010	7.79
WV Fork US Outlet 003 (Blacksville II)	3/17/2010	8.10
WV Fork US Outlet 003 (Blacksville II)	3/23/2010	7.94
WV Fork US Outlet 003 (Blacksville II)	3/24/2010	7.99
WV Fork US Outlet 003 (Blacksville II)	3/25/2010	8.01
WV Fork US Outlet 003 (Blacksville II)	3/29/2010	7.48
WV Fork US Outlet 003 (Blacksville II)	3/30/2010	7.58
	Median Value	7.99
WV Fork @ Wadestown,WV	3/1/2010	8.23
WV Fork @ Wadestown,WV	3/2/2010	8.30
WV Fork @ Wadestown,WV	3/8/2010	8.07
WV Fork @ Wadestown,WV	3/9/2010	7.89
WV Fork @ Wadestown,WV	3/12/2010	7.64
WV Fork @ Wadestown,WV	3/17/2010	8.06
WV Fork @ Wadestown,WV	3/23/2010	8.14
WV Fork @ Wadestown,WV	3/24/2010	8.03
WV Fork @ Wadestown,WV	3/25/2010	8.10
WV Fork @ Wadestown,WV	3/29/2010	8.12
WV Fork @ Wadestown,WV	3/30/2010	7.76
	Median Value	8.07
St. Leo DS AMD Plant	3/1/2010	6.91
St. Leo DS AMD Plant	3/2/2010	7.31
St. Leo DS AMD Plant	3/8/2010	8.33
St. Leo DS AMD Plant	3/9/2010	8.16
St. Leo DS AMD Plant	3/12/2010	7.64
St. Leo DS AMD Plant	3/17/2010	8.27
St. Leo DS AMD Plant	3/23/2010	8.16
St. Leo DS AMD Plant	3/24/2010	8.08
St. Leo DS AMD Plant	3/25/2010	8.22
St. Leo DS AMD Plant	3/29/2010	8.20
St. Leo DS AMD Plant	3/30/2010	8.41
	Median Value	8.16

TABLE 3

USGS Stream Gage No. 03072000
Dunkard Creek at Shannopin, PA

Date	Flow (cfs)
9/1/2009	20
9/2/9009	20
9/3/2009	19
9/4/2009	20
9/5/2009	19
9/6/2009	19
9/7/2009	24
9/8/2009	26
9/9/2009	32
9/10/2009	27
9/11/2009	25
9/12/2009	23
9/13/2009	21
9/14/2009	19
9/15/2009	17
9/16/2009	21
9/17/2009	21
9/18/2009	20
9/19/2009	18
9/20/2009	18
9/21/2009	20
9/22/2009	21
9/23/2009	20
9/24/2009	19
9/25/2009	18
9/26/2009	23
9/27/2009	37
9/28/2009	50
9/29/2009	45
9/30/2009	41
Average	24
Minimum	17
Maximum	50

TABLE 4

Dunkard Creek Drainage Area Summary

Location	Watershed (Square Miles)	Drainage Area Ratio South Fork to WV Fork at Wadestown	Drainage Area Ratio South Fork to WV Fork at Blacksville	Drainage Area Ratio South Fork to Dunkard Creek at USGS Gaging Station	Flow Based on Drainage Area (cfs)
St. Leo NPDES Outlet 016 in South Fork	3.41	0.17	0.13	0.01	0.36
South Fork	6.33	0.32	0.24	0.03	0.66
West Virginia Fork of Dunkard Creek at Wadestown	19.53	1.00	0.74	0.09	2.05
West Virginia Fork at Blacksville	26.46		1.00	0.12	2.77
Dunkard Creek at USGS Gaging Station at Shannopin, PA	229			1.00	24

Average Flow at USGS Gage at Shannopin, PA for September 2009 24 cfs

TABLE 5

Stream Flow at Four Locations Based On Associated Drainage Basin Area

September 2009 Stream Flow

	USGS Gage at Shannopin, PA (cfs)	South Fork at St. Leo Outlet 016 (cfs)	South Fork at Mouth (cfs)	WV Fork Downstream of Wadestwon (cfs)	WV Fork at Blacksville (cfs)
Drainage Area Ratio	1.00	0.0149	0.0276	0.0853	0.1155
9/1/2009	20	0.30	0.55	1.71	2.31
9/2/9009	20	0.30	0.55	1.71	2.31
9/3/2009	19	0.28	0.53	1.62	2.20
9/4/2009	20	0.30	0.55	1.71	2.31
9/5/2009	19	0.28	0.53	1.62	2.20
9/6/2009	19	0.28	0.53	1.62	2.20
9/7/2009	24	0.36	0.66	2.05	2.77
9/8/2009	26	0.39	0.72	2.22	3.00
9/9/2009	32	0.48	0.88	2.73	3.70
9/10/2009	27	0.40	0.75	2.30	3.12
9/11/2009	25	0.37	0.69	2.13	2.89
9/12/2009	23	0.34	0.64	1.96	2.66
9/13/2009	21	0.31	0.58	1.79	2.43
9/14/2009	19	0.28	0.53	1.62	2.20
9/15/2009	17	0.25	0.47	1.45	1.96
9/16/2009	21	0.31	0.58	1.79	2.43
9/17/2009	21	0.31	0.58	1.79	2.43
9/18/2009	20	0.30	0.55	1.71	2.31
9/19/2009	18	0.27	0.50	1.54	2.08
9/20/2009	18	0.27	0.50	1.54	2.08
9/21/2009	20	0.30	0.55	1.71	2.31
9/22/2009	21	0.31	0.58	1.79	2.43
9/23/2009	20	0.30	0.55	1.71	2.31
9/24/2009	19	0.28	0.53	1.62	2.20
9/25/2009	18	0.27	0.50	1.54	2.08
9/26/2009	23	0.34	0.64	1.96	2.66
9/27/2009	37	0.55	1.02	3.16	4.28
9/28/2009	50	0.74	1.38	4.26	5.78
9/29/2009	45	0.67	1.24	3.84	5.20
9/30/2009	41	0.61	1.13	3.50	4.74
Average	24	0.36	0.66	2.05	2.77